CLAIMS

1. A DNA of the following (a), (b) or (c):

(a) a DNA having the nucleotide sequence shown under SEQ ID NO:1

(b) a DNA having a nucleotide sequence derived from the nucleotide sequence of SEQ ID NO:1 by the deletion, addition, insertion and/or substitution of one or a plurality of nucleotides

and coding for a protein having decaprenyl diphosphate synthase activity

(c) a DNA which hybridizes with the DNA having the nucleotide sequence of SEQ ID NO:1 under a stringent condition

and codes for a protein having decaprenyl diphosphate synthase activity.

2. A protein of the following (d) or (e):

(d) a protein having the amino acid sequence shown under SEQ ID NO:2

(e) a protein having an amino acid sequence derived from the amino acid sequence of SEQ ID NO:2 by the deletion, addition, insertion and/or substitution of one or a plurality of amino acids and having decaprenyl diphosphate synthase activity.

3. A DNA coding for the protein according to Claim 2.

4. An expression vector constructed by cloning the DNA according to Claim 1 or 3 in an expression vector.

5. The expression vector according to Claim 4 wherein the expression vector is pUCNT.

6. The expression vector according to Claim 5 wherein the expression vector is pNTSa1.

Sub A2

7. A transformant as obtainable by transforming a host microorganism with the DNA according to Claim 1 or 3.

8. A transformant as obtainable by transforming a host microorganism using the expression vector according to Claim 4, 5 or 6.

9. The transformant according to Claim 7 or 8 wherein the host microorganism is Escherichia coli.

10. The transformant according to Claim 9 wherein the Escherichia coli is Escherichia coli DH5 α.

11. The transformant according to Claim 10 which is E. coli DH5α (pNTSa1) (FERM BP-6844).

Sub A3

12. A process for producing a coenzyme Q_{10} which comprises culturing the transformant according to Claim 7, 8, 9, 10 or 11 in a culture broth and harvesting the coenzyme Q_{10} produced and accumulated in the resulting culture.

Sub A4